

The Visitors Sportfishing Survey — 1984

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THE VISITORS SPORTFISHING SURVEY 1984

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THE VISITORS SPORTFISHING SURVEY - 1984

ABSTRACT

James, M.D. 1986. The Visitors Sportfishing Survey - 1984. Can. MS Rep. Fish. Aquat. Sci. 1894: v + 35 p.

The 1984 Visitors Sportfishing Survey obtained information about the sportfishing activities of visitors to B.C. There were 83,679 licensed visiting anglers in the 1984 licence year. The majority of visiting anglers came from Alberta and Washington state.

Visiting anglers fished an estimated total of 518,300 angler days and caught 251,900 salmon. At the same time, they made expenditures which had a considerable impact on the Canadian economy. Visitors' sportfishing expenditures totalled \$51 million in 1984, and generated 1,631 direct and indirect person years of employment and \$51 million worth of direct and indirect income impacts in British Columbia.

Visitor sportfishing has direct and indirect benefits for Canadians. The direct benefits consist of the fun and excitement that visiting Canadians receive from sportfishing, valued at \$6.36 million, and the revenue from all visitors' licence sales, \$.75 million. The indirect benefits of sportfishing consist of the net increase in national income generated by the sportfishing related expenditures of non-Canadian anglers. These amount to \$10.6 million. Combining direct and indirect benefits, the total value to Canadians of non-resident sportfishing was \$17.71 million in 1984.

RESUME

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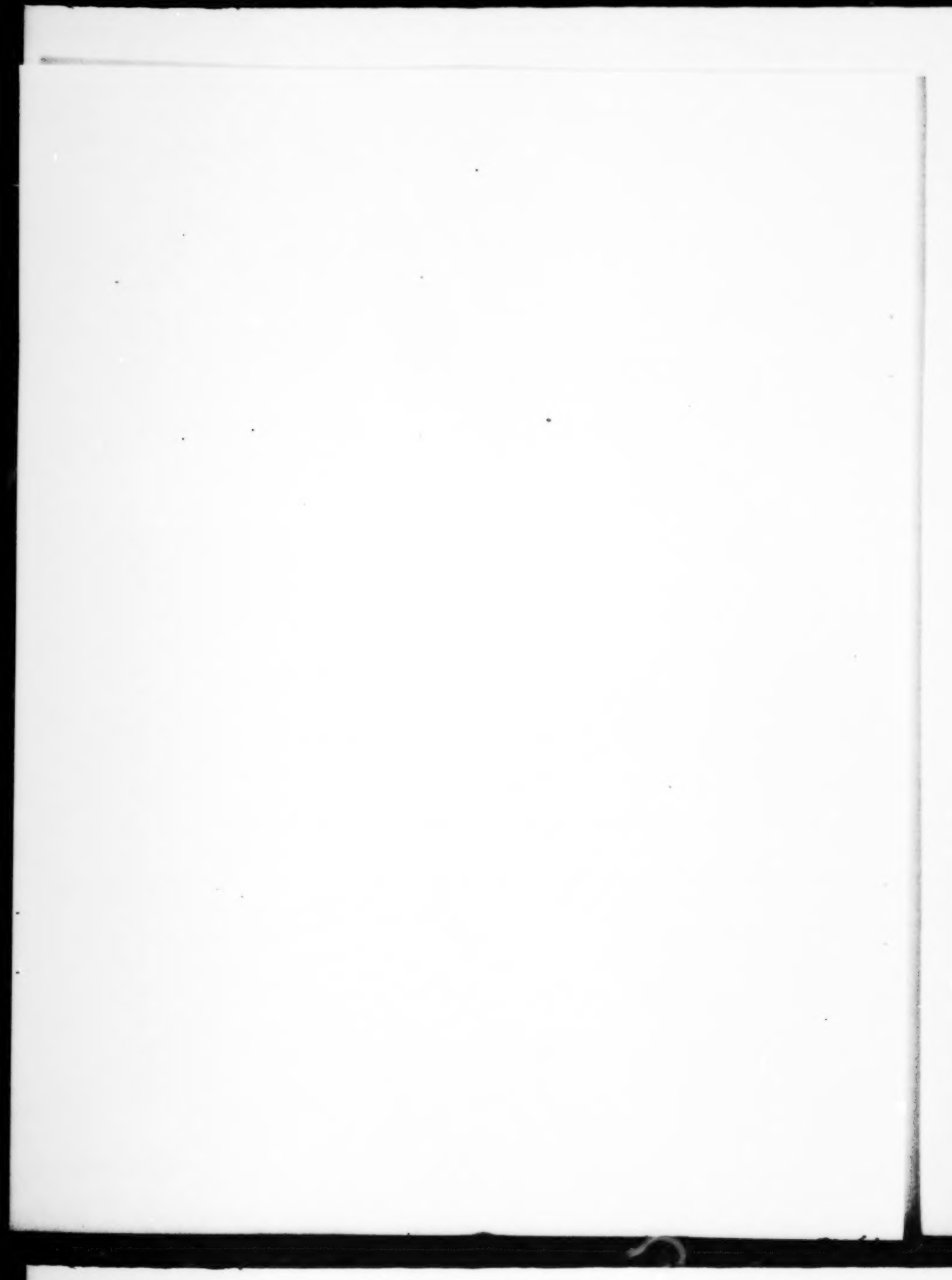
L'enquête menée en 1984 auprès des pêcheurs sportifs non-résidents a fourni des données sur leurs activités en C.-B. Cette année-là, 83 679 pêcheurs à la ligne venant surtout de l'Alberta et de l'État de Washington étaient en possession d'un permis.

Pendant un total estimatif de 518 300 jours de pêche, les visiteurs ont capturé 251 900 saumons et ont effectué des dépenses qui ont beaucoup profité à l'économie canadienne. Au total, les dépenses liées à la pêche sportive s'élevaient à \$51 millions en 1984 et elles ont procuré directement ou indirectement en C.-B. 1 631 années-personnes d'emplois et \$51 millions de revenus.

La pêche sportive de non-résidents procure des avantages directs et indirects aux Canadiens. Les premiers se situent au niveau du vif plaisir que les visiteurs Canadiens tirent de la pêche sportive, dont la valeur est chiffrée à \$6,36 millions auxquels s'ajoutent les \$750 680 obtenus de la vente de permis. Les avantages indirects comprennent l'augmentation nette de revenu national engendrée par les dépenses des pêches sportifs étrangers qui s'élèvent à \$10,6 millions. Pour les Canadiens, ces avantages directs et indirects ont totalisé \$17,71 million en 1984.

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1. INTRODUCTION

The Visitors Sportfishing Survey is part of a database which contains information on sportfishing in tidal waters of British Columbia. It complements the Tidal Sportfishing Diary Program, which provides data on the fishing activities of B.C. resident anglers. The questionnaire was sent out to a random sample of 2,485 licenced tidal anglers who reside in other provinces or territories in Canada or in the United States. Anglers were asked to provide information about trips to British Columbia that included fishing in tidal waters, including catch and effort data and information on trip expenditures (see Appendix A for a copy of the questionnaire). There was a usable response rate of 71% for the 1984 questionnaire. The results of the survey and an analysis of the value of visitor sportfishing based on those results are reported here.

2. VISITING ANGLERS

2.1 The Tourist as Angler

Tourism is the third largest revenue generating industry, after forestry and mining, in British Columbia. It constituted approximately 5% of the gross provincial product in 1984. During 1984, visitors made an estimated 6.6 million person-trips to the province. Almost half (3.16 million) of these visits were from other areas of Canada, 2.97 million were from the United States, and 0.47 million were from overseas. Of the 6.6 million visitors to the province, 83,184 or 1.3% purchased a tidal sportfishing licence.

2.2 Visiting Anglers

All anglers aged 16 and over require a licence to fish in B.C. tidal waters for any finfish. This has been a requirement since 1981.

Because the tidal water sport fishery is the sole responsibility of the federal government, non-residents are defined as non-Canadians. Non-Canadian anglers are charged higher fees than Canadians. Table 2.1 presents the current schedule of fees and the number of licences sold in 1981, 1982, 1983/84, and 1984/85. In 1983 the licence year was switched to cover April 1 to March 31 in order to coincide with the freshwater licence year. All data in this report are for the 1984/85 licence year.

Table 2.1
B.C. TIDAL SPORTFISHING LICENCE SALES

	FEE	NUMBER SOLD IN 1981	NUMBER SOLD IN 1982	NUMBER SOLD IN 1983/84	NUMBER SOLD IN 1984/85
Resident Annual	\$ 5.00	228,127	242,293	245,672	241,728
Non-Resident Annual	20.00	19,340	17,779	17,901	19,900
Non-Resident 3-Day	10.00	12,832	12,622	12,991	15,386
Resident/Non-Resident 1-Day	3.50	21,948	20,967	23,112	31,559
TOTAL		282,247	293,661	299,676	308,573

Information from the licence sample provides some basic data on the origin of anglers. Visitors made up an estimated 27% of the licenced tidal anglers in B.C., with a total of 83,679 licences. An estimated 8.7% of all resident annual licences are held by visiting Canadians who are not residents of B.C. In addition, 86.9% of one-day licences were sold to anglers who are not residents of B.C.

The overwhelming majority of out-of-province Canadian tidal anglers come from Alberta, and about half of American visiting anglers are from Washington state. The origin of visiting anglers is summarized in Table 2.2.

Table 2.2
ORIGIN OF VISITING ANGLERS IN 1984

AMERICAN		CANADIAN	
STATE OF RESIDENCE	% OF ALL AMERICAN VISITING ANGLERS	PROVINCE OF RESIDENCE	% OF ALL CANADIAN VISITING ANGLERS
Washington	53.5	Alberta	67.9
Oregon	8.4	Saskatchewan	6.8
California	18.5	Manitoba	4.6
Idaho	2.2	Ontario	16.3
Other	17.4	Quebec	2.8
		Yukon and NWT	.7
		Maritimes	.9
TOTAL	100.0	TOTAL	100.0

The licence also provides information on the age and sex of visiting anglers. The age distribution of visiting anglers and B.C. resident anglers is shown in Table 2.3. Visiting anglers are older on average than resident anglers. In addition, 79% of visiting anglers are men.

Table 2.3
AGE DISTRIBUTION OF VISITING TIDAL ANGLERS
AND B.C. RESIDENT ANGLERS

AGES	VISITORS %	B.C. RESIDENTS %
16-25	7.5	14.9
26-35	17.5	25.7
36-45	22.7	22.9
46-55	21.1	16.0
56-65	16.6	11.9
65 and over	14.6	8.6
TOTAL	100.0	100.0

Since anglers under 16 do not require a licence, they are not included in the above age distribution table. The survey indicates an estimated 13,000 anglers under 16 years of age visited B.C. in 1984.

2.3 Motivations and Perceptions of Visiting Anglers

Visiting anglers were asked about their reasons for coming to this province. The choices and their responses were as follows:

Table 2.4
ANGLERS REASONS FOR COMING TO B.C.

Fishing	44.4%
General Vacation	26.0%
Visiting Friends and Relatives	13.6%
Other	3.3%
Business	3.4%
Checked more than one of the above	9.3%
TOTAL	100%

Fishing was cited as the main reason for coming to B.C. for 44% of the respondents. If there were no tidal sportfishing available in B.C., 46% of the respondents indicated that they would still have come to B.C., 14% would still have come but not stayed as long, and 40% would not have come at all.

Respondents were also asked to rank the importance of selected factors in their decisions about where to go fishing with one being the most important factor. In order of their overall importance, these factors were: 1) catching any fish, 2) the scenic beauty of the area, 3) accompanying friends, 4) catching limit of fish, and 5) getting away from crowds. An "other" category was also included to account for other reasons respondents might have to select a location to fish. Very few respondents made use of this category, however for those who did the "other" factor was often the most important. The results of this question are presented in Table 2.5. The top two reasons for choosing where to go fishing appear to be equally important. It is interesting to note that there appears to be a group for whom limiting out is important while at the same time the largest single percentage response indicates that catching the limit of fish is the least important factor.

Table 2.5
RANKING OF SELECTED FACTORS IN
DETERMINING WHERE TO FISH

Overall Rank	Factors	% Ranking Importance				
		1	2	3	4	5
		most				least
1.	Catching any fish	<u>30.4</u>	27.8	19.3	16.7	4.9
2.	Beauty of area	27.8	<u>29.8</u>	26.3	12.0	4.1
3.	Accompanying friends	21.6	21.0	<u>23.5</u>	20	13.8
4.	Catching limit of fish	20.0	12.0	9.0	<u>17.0</u>	37.4
5.	Getting away from crowds	5.7	15.7	24.3	26.1	<u>27.0</u>

Visiting anglers were also asked which species they preferred to catch. Table 2.6 indicates the percentage of respondents preferring each species. Salmon, including chinook and coho, are the preferred species for 92 percent of visiting anglers.

Table 2.6
SPECIES PREFERENCE OF VISITING ANGLERS

<u>Species</u>	<u>% preferring</u>
Chinook	40.1
Coho	11.0
Any Salmon	40.6
Halibut	3.8
Lingcod	2.5
Rockfish	.4
Crabs	.2
Clams	.2
Other	1.2
TOTAL	100.0%

Many visiting anglers are repeat visitors to B.C. In last year's survey 5% of the respondents indicated they had not made any trips to fish in B.C. during the last 5 years. Forty-four percent of visiting anglers had visited B.C. to fish three or more times in the past five years. In order to narrow down this information somewhat, this year's survey asked respondents how many fishing trips they made to B.C. in the year before. Exactly one half of the respondents had made one or more trips which included sportfishing the year before.

The majority (74%) of visiting anglers found out about tidal sportfishing in B.C. from friends or relatives. About 1% of respondents found out about sportfishing in B.C. from travel agents; 4% from magazine advertising; 6% from local advertising; and 15% from other sources including past visits, having lived in B.C., and sportfishing shows.

A number of visiting tidal anglers also fish in fresh water, as 24% of respondents also purchased freshwater fishing licences.

Anglers were asked to comment on their fishing experiences in B.C. tidal waters. Out of 248 comments on the fishing, 106 (43%) respondents indicated the fishing was good or excellent, 45 (18%) felt it was fair, and 97 (39%) said fishing was poor. This represents a change from the 1983/84 survey in which the majority of respondents who commented on the quality of the fishery stated that fishing was poor compared to previous years. In addition, many respondents made favourable comments about their visit in general, the area, and the residents of B.C. A summary of the comments is provided in Appendix B.

3. VISITOR FISHING ACTIVITY AND CATCH

The majority (80%) of anglers surveyed made one trip to B.C. in 1984, during which they fished in tidal waters. An estimated 12% made two trips, and 8% made three trips or more to the province during which they fished. The average length of stay was 13.7 days. The average number of people in visiting parties was 3.7.

3.1 Distribution of Visitor Fishing Activity

Visiting licenced anglers fished a total of 518,334 angler-days in British Columbia in 1984. Visiting Canadians accounted for 127,227 angler days and non-Canadians 391,107 angler days.

Certain areas are exceedingly popular with visiting anglers. Table 3.1 shows the percentage of visitors' angler-days reported in each region and statistical area. A map of the Department of Fisheries statistical areas is included in the sample questionnaire in Appendix A.

The South Coast and Fraser region accounts for 80% of visitor angler-days and, in particular, the Campbell River area (statistical area 13) is very popular, accounting for 31.3% of visitor fishing activity. Other popular areas include the Qualicum and Comox areas (area 14), the north end of Vancouver Island (area 12), and Port Alberni (area 23).

Table 3.1
DISTRIBUTION OF VISITOR FISHING ACTIVITY

<u>Area</u>	<u>Angler-Days</u>	<u>% of Total Visitors' Angler-Days</u>
North and Central Coast		
1	1,399	.3
2	3,297	.6
3	46	-
4	4,003	.8
5	1,074	.2
6	3,810	.7
7	1,259	.2
8	7,065	1.4
9	14,295	2.8
10	2,369	.5
11	3,182	.6
Total	41,799	8.1
South Coast and Fraser		
12	60,194	11.6
13	162,189	31.3
14	49,494	9.5
15	23,851	4.6
16	25,533	4.9
17	21,043	4.1
18	35,176	6.8
19	18,686	3.6
20	8,536	1.6
28	3,515	6.8
29	7,195	1.4
Total	415,412	80.1
West Coast Vancouver Island		
21	5,781	1.1
22	47	-
23	44,698	8.6
24	4,666	.9
25	1,818	.4
26	607	.1
27	3,506	.7
Total	61,123	11.8

3.2 Visiting Anglers Reporting Catch

Visiting anglers participating in the survey were asked to report on their catch for the year. As in 1983, respondents were asked for party catch, which was then divided by the number of anglers in the party to arrive at individual catch. Table 3.2 shows estimated catch of each species by region.

Visitors caught a total of 252,000 salmon in the 1984 licence year, compared to 856,000 salmon caught by residents of B.C. (Bijsterveld and James, 1986), for a total estimated coastwide catch by licenced anglers of 1,108,000 salmon. For a more detailed discussion of the catch and effort estimates, see Bijsterveld and James, 1986.

3.3 Catch Per Angler Day

Visiting anglers generally have a lower average catch per day than residents of British Columbia, however, those who purchase package deals and those whose specific purpose for coming to B.C. was to fish have higher than average catches per angler day. Comparisons of catch per angler day for chinook, coho, and total salmon are shown in Table 3.3.

4. ECONOMIC VALUE OF RECREATIONAL FISHING BY VISITORS

In order to manage the fisheries resource in a manner that will yield the greatest benefits to Canadians, the net benefit or economic value derived from competing uses of the resource must be evaluated. Generally, resource use results in a product which is sold and therefore has a market price. With market prices it is possible to calculate the net economic gain from different resource uses and compare them on that basis. However, recreational fishing is not marketed or sold in the manner of other goods and services. Thus there is no market price or value attached to a unit of recreational fishing such as an angler day. This is not to say that recreational fishing has no value. What it does mean is that the value of recreational fishing must be derived from indirect evidence.

Table 3.2
1984/85 VISITORS SURVEY
CATCH¹ BY REGION
(thousands)

<u>Species</u>	<u>North and Central Coast</u>	<u>South Coast and Fraser</u>	<u>W. Coast Vancouver Is.</u>	<u>Total</u>
	(1-11) ²	(12-20,28,29) ²	(21-27) ²	(1-29) ²
Angler Days	41.8	415.4	61.1	518.3
Chinook	7.6	68.0	14.3	89.9
Coho	11.9	118.9	8.6	139.4
Other Salmon	<u>2.7</u>	<u>18.2</u>	<u>1.7</u>	<u>22.6</u>
Total Salmon	22.2	205.1	24.6	251.9
Trout	0	.1	.3	.4
Lingcod	1.9	22.0	3.1	27.0
Rockfish	1.3	25.1	2.6	29.0
Pacific Cod	.4	7.8	.9	9.1
Halibut	.2	.5	.6	1.3
Other Groundfish	2.3	23.7	10.1	36.1
Other Fish	.1	10.6	1.6	12.3
Crab	4.6	24.4	2.7	31.7
Shrimp/Prawns	.3	19.1	.4	19.8
Clams	5.3	35.0	.4	40.7
Mussels	0	.2	0	.2
Abalone	0	.6	.2	.8
Oysters	0	20.6	.6	21.2
Other Shellfish	0	90.4	1.1	91.5

¹ Catch is reported as number of fish kept.

² DFO statistical areas.

Table 3.3
COMPARISONS OF CATCH PER ANGLER DAY OF SPECIES

	CHINOOK	COHO	TOTAL SALMON
Residents of B.C.	0.27	0.29	0.59
All Visitors	0.17	0.27	0.48
Visiting Canadians	0.17	0.24	0.48
. Those purchasing package deal	0.32	0.32	0.76
. Those not purchasing package	0.15	0.24	0.45
Visiting Non-Canadians	0.17	0.28	0.49
. Those purchasing package deal	0.29	0.24	0.60
. Those not purchasing package	0.16	0.28	0.47
Visiting Canadians	0.17	0.24	0.48
Main Reason: . Visiting	0.12	0.16	0.34
. Fishing	0.24	0.36	0.68
. Business	0.21	0.19	0.55
. General Vacation	0.14	0.15	0.32
. Other	0.06	0.03	0.13
. Several	0.12	0.25	0.47
Visiting Non-Canadians	0.17	0.28	0.49
Main Reason: . Visiting	0.13	0.30	0.48
. Fishing	0.24	0.36	0.64
. Business	0.16	0.24	0.47
. General Vacation	0.07	0.15	0.25
. Other	0.05	0.19	0.26
. Several	0.17	0.24	0.46

Two kinds of values, or benefits, accrue to society from recreational fishing activity; primary or direct benefits and secondary benefits. Primary benefits include the direct benefits (e.g. fun, excitement) that anglers receive from sportfishing. Where there is no charge for sportfishing, this direct benefit is captured by the angler. This unpaid-for benefit is relevant only when the anglers are among the people in whose interests the resource is being managed. In the case of tidal sportfishing, the resource is managed for all Canadians. The economic value of sportfishing must include the benefits derived by residents of Canada from sport fishing but exclude unpaid-for recreation enjoyment of non-residents. Another primary benefit from sportfishing is licence fees. To the extent that sportfishing benefits are paid for, the amount spent must be included as a primary benefit. Thus all licence fees are included as primary benefits.

The other category of benefits of recreational fishing, secondary benefits, refers to the economic gain Canadians derive from anglers' spending on goods and services associated with sportfishing. Secondary benefits are measured by estimating the total amount of spending generated by fishing activity, and subtracting from this the economic cost of providing those goods and services purchased, to yield a measure of net benefit. Expenditures which would still have been made in Canada in the absence of sportfishing opportunities are not counted as part of the secondary benefits of the sportfishery.

The following two sections give details on how both primary and secondary benefits from visitor sportfishing in B.C. tidal waters are calculated.

4.1 Primary Benefits of Visitor Recreational Fishing

The primary or direct benefit of recreational fishing by visiting Canadian anglers, over and above what they currently pay to go fishing, has been estimated to average \$50.00 per angler day. An angler day is defined as any day during which an individual goes fishing regardless of the time spent fishing. This value is based on preliminary analysis of a 1984 survey of tidal waters

anglers in four regions, Victoria, Campbell River, the Sunshine Coast and Port Alberni (Cameron and James, 1986). Multiplying the value per angler day times the number of angler days enjoyed by visiting Canadian anglers results in a total annual value of \$6.36 million.

The other aspect of primary benefits is licence fees. Table 4.1 details the types of licences sold to visiting anglers, the unit cost and total revenue derived. The total value of visitors licence fees in 1984 was \$750,680.

Table 4.1

Licence Type	1984 Sales	Fee	Revenue
Resident Annual	20,988	\$ 5.00	\$104,940
Non-Resident Annual	19,889	20.00	397,780
Non-Resident 3 day	15,367	10.00	153,670
One day	<u>26,940</u>	3.50	<u>94,290</u>
Total	83,184		\$750,680

Combining the two aspects of primary or direct value of visitor recreational fishing results in a total value of 7.11 million dollars.

4.2 Secondary Benefits of Visitor Recreational Fishing

In order to calculate the net secondary benefits from sportfishing activity it is first necessary to determine the total amount of visitor expenditures made in Canada because of the availability of sportfishing. Expenditures by anglers which would still be made in Canada, even in the absence of sportfishing opportunities, must not be included. For this reason the expenditures of visiting Canadians are not included as secondary benefits as it is reasonable to assume that visiting Canadian anglers would have spent their money elsewhere in the economy, thus no change in net benefits to the Canadian economy would occur although this would certainly impact upon local businesses dependent on

the tidal water sportfishery. In addition, the expenditures of visitors from outside Canada who would still have come even if tidal sportfishing opportunities did not exist can not be included as gross benefits. In the questionnaire respondents were asked if sportfishing opportunities did not exist in B.C. would they 1. still have come, 2. still have come but stayed less (and how many days less) or 3. not have come at all. Forty percent of respondents indicated they would not have come. All of the expenditures of these people are considered part of gross secondary benefits. Fourteen percent indicated that they would still have come but would stay an estimated average of 56 percent less days in B.C. Thus 56 percent of the expenditures of this segment of the population are assumed to be the amount that would not have been spent in B.C. in the absence of tidal sportfishing and therefore included in gross secondary benefits. Table 4.2 shows the total 1984 expenditures by visiting non-Canadian anglers that are attributable to sportfishing. These expenditures are the measure of gross secondary benefits to Canada of visitor sportfishing.

The net benefit, or economic value, is the net increase in national income that occurs as a result of angler expenditures directly related to sportfishing. Direct changes to national income are calculated using the Statistics Canada 1979 Inter-Provincial Input/Output model. Wages and salaries are included as net benefits to the economy because unemployment in hospitality related industries was exceedingly high in 1984 and therefore these wages and salaries would not have been paid (individuals would not have been otherwise employed) if these expenditures had not been made. In a fully employed economy wages and salaries would not be considered a net benefit to the economy. Including wages and salaries does overstate the net benefits because some people in the industry have alternative employment opportunities. The extent of the overstatement is not known.

The total secondary benefits from visitor sportfishing are \$10.6 million (Table 4.3). The major component of secondary benefits is wages and salaries, at \$5.7 million.

The total value of visitor sportfishing in British Columbia is the sum of both primary and secondary benefits or \$17.71 million in 1984.

Table 4.2
ESTIMATED TOTAL EXPENDITURES BY NON-CANADIANS
SOLELY ATTRIBUTABLE TO SPORT FISHING IN 1984
(\$'000)

Package Charter	\$ 9,273
Lodging	1,779
Trailer Parks, Campgrounds	783
Food	1,371
- restaurant	1,022
- groceries	417
- alcoholic beverages	651
B.C. Travel	390
- car	407
- air	168
- ferry	471
- other	432
Boat Rental	135
Fishing Supplies	1,253
Bait	334
Boat Costs	304
- gas	98
- repairs	705
- moorage	231
- other	776
Guide or Charter Services	
Fish Processing	
Other	
Total	\$ 21,000

Table 4.3
SECONDARY BENEFITS OF VISITOR RECREATIONAL FISHING
(\$'000)

	Direct GDP
Wages and Salaries	\$5,743
Supplementary Labour Income	243
Net Income Unincorp Business	1,146
Other Operating Surplus	2,273
Commodity Indirect Taxes	920
Other Indirect Taxes	325
Gov't Goods and Services	16
Subsidies	-62
Total	\$10,605

5. ECONOMIC IMPACTS OF VISITOR SPORTFISHING

Expenditures on recreational fishing by visitors to British Columbia have direct and indirect impacts on both the B.C. economy and the Canadian economy as a whole. Direct impacts refer to the employment and income generated in businesses providing goods and services directly to anglers. Indirect impacts are defined as employment and income generated in other industries by the expenditures of those businesses which provide goods and services to anglers. Indirect impacts also include the induced impacts created by the re-spending of wages and salaries earned as a result of sportfishing expenditures. The closed version of the Statistics Canada 1979 Inter-Provincial Input-Output Model is used here to estimate income and employment impacts.

Total expenditures by visiting tidal anglers in British Columbia are estimated to have been \$51 million in 1984. Of these expenditures \$20 million are attributable to visiting Canadians and \$31 million to other visitors. Table 5.1 details expenditure estimates by type of spending. Survey respondents were asked about party expenditures on trips that included sportfishing and the number of licenced anglers in the party. Total expenditures on each questionnaire were then divided by the number of licenced anglers to arrive at expenditures per licenced angler. The expenditure data therefore includes expenditures made by, or on behalf of, non-anglers or under 16 unlicenced anglers who are in the sportfishing party. Thus the data provided by the survey includes the expenditures of all parties coming to B.C. who went salt water sportfishing either as the main purpose of the trip or as a recreational activity which was simply a part of the visit. As indicated in section 2.3, 44% of respondents indicated that fishing was the main reason for coming to British Columbia.

The income and employment impacts related to expenditures by visiting anglers are presented in Table 5.2. Direct and indirect impacts are shown for British Columbia and the Canadian economy as a whole and are divided into income and employment impacts for Canadian visitors, non-Canadian visitors and all visitors combined.

Table 5.1

ESTIMATED TOTAL EXPENDITURES BY VISITING ANGLERS
IN BRITISH COLUMBIA IN 1984
(\$'000)

	<u>Visiting Canadians</u>	<u>Non-Canadians</u>	<u>Total</u>
Charter Packages	9,580	12,161	21,741
Lodging	2,049	2,631	4,680
Trailer Park	243	1,115	1,358
Food - restaurant	1,556	2,378	3,934
- groceries	776	1,848	2,624
Alcoholic Beverages	451	722	1,173
B.C. Travel - car	1,280	1,058	2,338
- air	775	599	1,374
- ferry	434	702	1,136
- other	176	306	482
Boat Rentals	530	690	1,220
Fishing Supplies	360	628	988
Bait	93	206	299
Boat costs - gas	292	2,176	2,468
- repairs	132	489	621
- moorage	134	513	647
- other	85	266	351
Guide or charter service	569	880	1,449
Fish processing	54	273	327
Other	590	1,272	1,862
Total	20,159	30,913	51,072

Table 5.2

EMPLOYMENT AND INCOME IMPACTS OF EXPENDITURES
BY VISITING TIDAL RECREATIONAL ANGLERS IN 1984

	<u>Canadian Visitors</u>	<u>Non-Canadian Visitors</u>	<u>Total</u>
Employment ¹ in B.C.			
Direct	454.7	641.6	1,096.3
Indirect	219	315.5	534.5
Total	673.7	957.1	1,630.8
Employment ¹ in Canada (total including B.C.)			
Direct	468.5	670.1	1,138.6
Indirect	412.1	605.4	1,017.5
Total	880.6	1,275.5	2,156.1
Income in B.C. (\$'000)			
Direct	9,817	14,319	24,136
Indirect	10,890	15,733	26,623
Total	20,707	30,052	50,759
Income in Canada (total including B.C.)(\$'000)			
Direct	10,371	15,408	25,779
Indirect	20,804	30,879	51,683
Total	31,175	46,287	77,462

¹ Employment in Person Years

In British Columbia there are 1,096.3 person years of direct employment as a result of visiting anglers' expenditures and a further 534.5 person years of indirect employment resulting from expenditures by businesses and employees of businesses which provide goods and services directly to anglers. The income impacts in British Columbia of visitors' expenditures total \$51 million, a direct income impact of \$24 million and an indirect income impact of \$27 million, where income is represented by an overall increase in Gross Domestic Product (wages and salaries + net income of unincorporated business + other operating surpluses + indirect taxes + government goods and services - subsidies). While these figures do not represent the net benefits to society resulting from recreational fishing activities of visiting anglers, they do give some idea of the scope of the industries associated with the recreational pursuits of visiting anglers.

6. SUMMARY

The 1984 Visitors Sportfishing Survey obtained information about the sportfishing activities of visitors to B.C. There were 83,679 licenced visiting anglers in the 1984 licence year. The majority of visiting anglers come from Alberta and Washington State.

Visiting anglers fished an estimated total of 518,300 angler days and caught 251,900 salmon. At the same time, they made expenditures which had a considerable impact on the Canadian economy. Visitors total sportfishing expenditures totalled \$51 million in 1984, and generated 1,631 direct and indirect person years of employment and \$51 million worth of direct and indirect income impacts in British Columbia.

Visitor sportfishing has direct and indirect benefits for Canadians. The direct benefits consist of the fun and excitement that visiting Canadians receive from sportfishing, valued at \$6.36 million, and the revenue from licence sales, \$750,680. The indirect benefits of sportfishing consist of the net

increase in national income generated by the sportfishing related expenditures of non-Canadian anglers. These amount to \$10.6 million. Combining direct and indirect benefits, the total value to Canadians of non-resident sportfishing was \$17.71 million in 1984.

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APPENDIX A



Government
of Canada

Gouvernement
du Canada

Fisheries
and Oceans

Pêches
et Océans

Visitor Sportfishing Survey

Canada

1. How many visits to British Columbia have you made in this licence year (April 1984-March 1985) which included fishing in B.C. Tidal waters?

_____ visit(s)

2. For each visit, please indicate:

- the number of people in your party
- the number of B.C. Tidal waters licence holders in your party
- the number of people fishing in your party aged 15 or under
- the total number of days spent in B.C. for each visit.

	<u>People in party</u>	<u>Tidal waters Licence holders in party</u>	<u>Anglers aged 15 or under in party</u>	<u>Days spent in B.C.</u>
Visit 1	_____	_____	_____	_____
Visit 2	_____	_____	_____	_____
Visit 3	_____	_____	_____	_____
Visit 4	_____	_____	_____	_____
Visit 5	_____	_____	_____	_____

3. What was your main reason for coming to British Columbia? (Please check one only)

- | | |
|---|---|
| ☐ Visiting friends and relatives | ☐ General vacation |
| ☐ Fishing | ☐ Other _____ |
| ☐ Business | _____ |

4. Please indicate how your decision to come to B.C. was affected by the availability of Tidal Waters sportfishing (please check one only)

If there were no Tidal sportfishing available in B.C.:

- ☐ I would still have visited B.C. and substituted other activities.
- ☐ I would still have visited but would not have stayed as long (I would have stayed _____ days less).
- ☐ I would not have come at all.

5. Please rank the importance of each of the following factors in your choice of a place to go fishing by placing the appropriate number in the box with 1 being the most important.

- ☐ natural or scenic beauty of the area
- ☐ accompanying friends
- ☐ catching any fish
- ☐ catching limit of fish
- ☐ getting away from crowds
- ☐ other (specify) _____

6. If you could catch any species of fish available in B.C., which would you prefer?

- | | | |
|---|-----------------------------------|--------------------------------------|
| ☐ chinook (king, spring) | ☐ halibut | ☐ crab |
| ☐ coho | ☐ lingcod | ☐ clams |
| ☐ any salmon | ☐ rockfish | ☐ other _____ |

7. Please fill in the following table, even if you and your party caught no fish. Instructions for filling out the table are given below.

MONTH	AREA	DAYS	NO. OF PEOPLE	CHINOOK	COHO	OTHER SALMON	OTHER FISH		SHELLFISH	
							number	type	number	type
August	13	4	3	6	3	1	2	lingcod		
August	14	3	3	0	0	0			3	crab

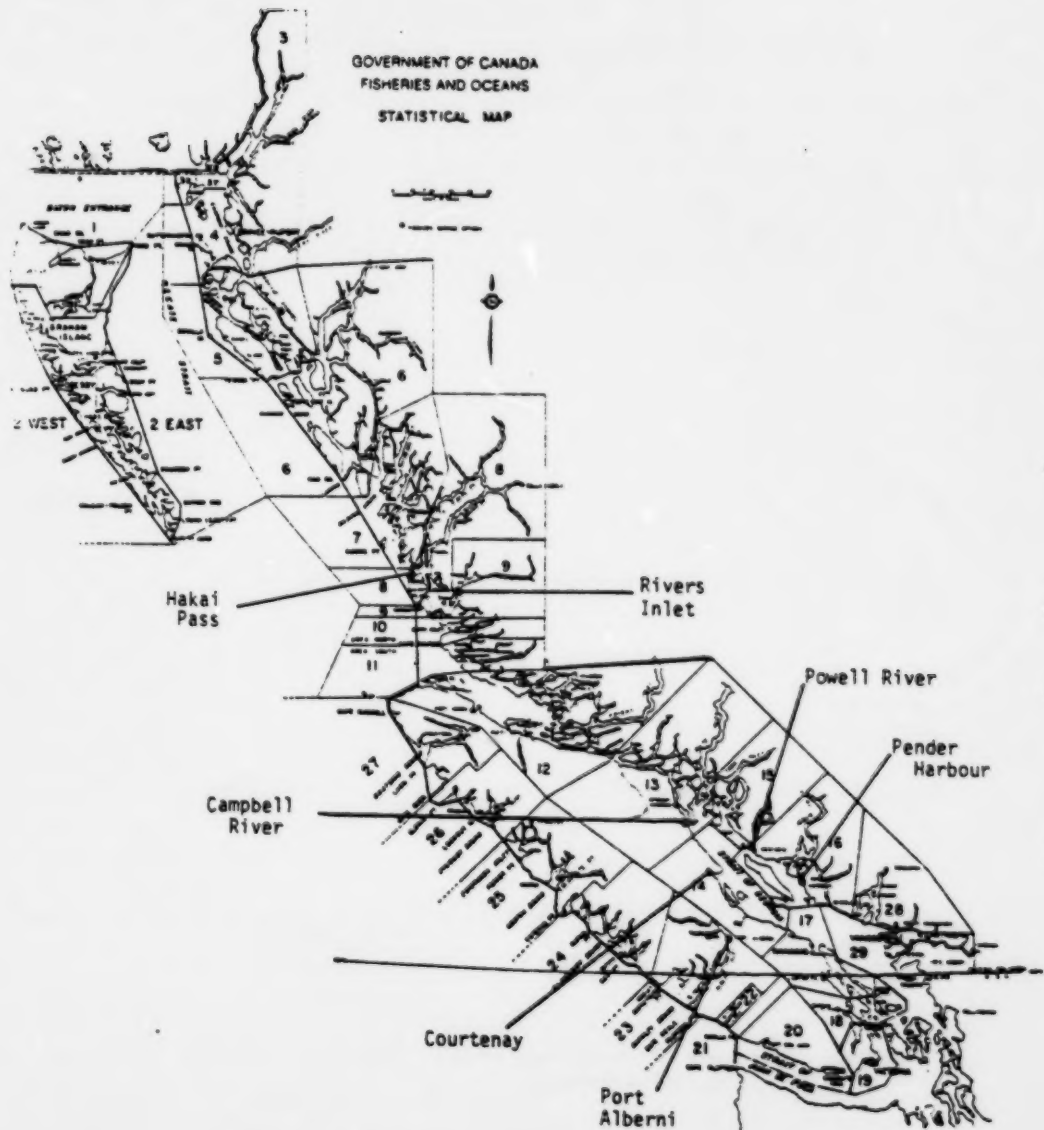
Month: Record the month(s) you personally fished in B.C. Tidal waters in the 1984/85 licence year (April 1984 through March 1985).

Area: Refer to the enclosed map of Fisheries statistical areas (opposite page), locate the area where you were fishing, and record the corresponding area number. If you fished in more than one area in the month, use a separate line for each area fished, and record the appropriate information for those areas on separate lines.

Days Fished: Record the days you personally fished in each area in each month, including the days where nothing was caught.

Number of People Fishing: Record the number of people, including yourself, who actually fished.

Catch: In the appropriate column, record the total number of fish caught by the fishing party (do not include fish that were released).



7. Did you purchase any "package" sportfishing trips, tours or outings to fish in B.C. Tidal waters in 1984/85 (for example, fly-in fishing camps or charter services where the price included transportation, lodging, food, tackle, bait, etc.)?

☐ yes

☐ no

If yes, what was the total price (Cdn \$'s) of the package? \$ _____

8. Excluding package trips, please estimate below the amount of money (in Canadian dollars) your party spent in B.C. on trips that included sportfishing in the 1984/85 licence year (April 1984-Mar. 1985):

- | | |
|--|----------|
| 1. Lodging (hotel, motel, cottage rental, etc.) | \$ _____ |
| 2. Trailer Park (campground fees) | \$ _____ |
| 3. Food - restaurant meals & snacks | \$ _____ |
| - groceries | \$ _____ |
| - alcoholic beverages | \$ _____ |
| 4. Travel Costs <u>within B.C.</u> - car | \$ _____ |
| - air | \$ _____ |
| - ferry | \$ _____ |
| - other | \$ _____ |
| 5. Boat Rentals | \$ _____ |
| 6. Fishing Supplies (tackle, rod, lures, etc.) | \$ _____ |
| 7. Bait | \$ _____ |
| 8. Household owned boat cost - gas | \$ _____ |
| - repairs | \$ _____ |
| - moorage | \$ _____ |
| - other | \$ _____ |
| 9. Guide or Charter services (not included in question 9 on package trips) | \$ _____ |
| 10. Fish processing (canning, smoking, etc.) | \$ _____ |
| 11. Other (Specify) | \$ _____ |

- ☐ travel agent

☐ friends or relatives

☐ other

☐ magazine advertising

- trip(s)

- ☐
- Yes**

☐ No

- ☐
- Yes

☐ No

13. Please feel free to comment on your fishing experience in B.C. Tidal waters and indicate how it could have been improved.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

APPENDIX B

1984 Non-Resident Sportfishing Survey

Comments - Summarized

- 61 - Fishing: excellent
- 45 - Fishing: good
- 45 - Fishing: fair
- 97 - Fishing: poor

- 123 - Residents: positive

- 209 - General trip: excellent
- 129 - General trip: good
- 4 - General trip: fair
- 4 - General trip: poor

- 151 - Area: positive

- 4 - Weather: good
- 4 - Weather: fair
- 20 - Weather: poor

Facilities

- 7 - Facilities: excellent
 - camping
 - trailer parks
- 1 - Facilities: good
 - Campbell River
- 3 - Facilities: poor
 - Ucluelet
 - need indoor plumbing, showers, sinks to clean fish, paved roads in trailer park
- 4 - Not enough camping facilities
 - for recreational vehicles
 - with hook-ups
- 1 - More accommodations
 - Pacific Rim area
- 1 - Overflow camping should not be the same price as regular
- 1 - Camping facilities need cleaning
- 1 - Bathing facilities need to be cleaned up
- 1 - More rest areas with shower facilities
- 1 - Improve roads
 - to Hunter Marina
 - into Bamfield
- 1 - More parking facilities
 - for recreational vehicles
- 6 - More boat ramps/launch ramps
- 4 - Improved boat ramps
- 6 - More moorage
 - for overnight
- 1 - Improved moorage
 - Sidney
- 1 - Need fishing piers
- 3 - More boat rental facilities
 - Port Hardy
- 1 - Need gas pumps open on Sunday
- 1 - Longer gas pump hours
- 2 - More garbage facilities
 - in Provincial parks
- 1 - Better supervision of Provincial parks
- 1 - Rivers Inlet is well managed
- 1 - Need freezing and packing fish facilities

Charters and Guides

- 24 - Guides: positive
- 3 - Guides: negative
- 2 - Guide boat was poor
 - dirty, not seaworthy
- 1 - Guide boat was overcrowded
- 1 - Guides need more experience
- 1 - Guide was uncooperative
 - wouldn't go into deep waters
- 1 - Guides lacked courtesy
- 2 - Guides were expensive
- 1 - Need standard guide prices

- 6 - Boat charters are expensive
- 1 - Need to support the charter boats
- 1 - More control over charter quality
- 2 - Charter service: excellent
 - Oak Bay
- 2 - Charter service: poor
- 1 - Charter staff were helpful and friendly
- 1 - Need holding tanks on charter boats
- 1 - More information available for charter boats

- 1 - Package trip was well organized

- 1 - Fishing boats: unsafe
- 4 - Rental boat cost: too high
- 1 - All boats should be equipped with survival gear
 - ie: waterproof container, compass, matches, flashlight

Limits

- 2 - Reduce size limit
 - on lingcod
- 1 - Eliminate size limit
 - undersized fish die when released
- 1 - Size restrictions on chinook makes fishing difficult
- 1 - Put a size limit on king salmon
- 1 - Size limit should be stated in inches and metric
- 3 - Lower daily limits
 - on king salmon
- 6 - Lower limits
 - on lingcod
- 3 - Increase limits
- 1 - Enforce fish limits
- 2 - Increase size limit
 - to 20-24 inches
- 5 - Don't lower limit
 - chinook
- 2 - Daily limit of 2 salmon
 - until stocks increase
- 1 - Put a limit on coho
- 1 - Limit salmon to 4/day, 8/person/trip
- 1 - Limit bottomfish
- 1 - Strict penalty on people who catch over limit
- 1 - Review halibut limits
- 2 - More control of limits
 - springs
- 1 - Should not be allowed to take more shellfish than can be eaten
- 1 - Weight limits imposed on visitors for shipping seem unfair

Licence

- 16 - Licence cost: high
- 4 - Licence cost: good
- 3 - Licence cost: low
- 2 - More licence sales outlets
 - outlets are not readily available
- 4 - Combine tidal and fresh licence
- 2 - Use licence money for enhancement
- 1 - Prefer licencing boat
- 1 - Information book with licence is good
- 1 - Offer a licence at half price for spouse
- 1 - Should sell licences in B.C. only
- 1 - Hard to find a three-day fish licence
- 1 - Did not like having to use one day licence on same day purchased
- 1 - No charge for tidal fishing
- 1 - Regulations should come with licence
- 1 - Sell licences in U.S.A.
 - Seattle

Commercial Fishing

- 9 - Reduce catch limits
- 9 - More control or policing over commercial fishermen
- 16 - Restrict/limit commercial fishing
 - from certain areas
 - in Georgia Strait
 - in recreational/tourist sites
 - from run areas
 - should be kept to open ocean
 - in sportfish areas
 - Kelsey Bay and Campbell River
- 4 - Seiners/gillnetters/commercial fishermen cleaned out area
- 5 - Too many commercial fishing boats in area
- 1 - Cut back on gillnetters/seiners/commercial fishermen
- 2 - Delayed opening of commercial fishing season was good
 - Georgia Straits
- 6 - Commercial nets/fishing affect the fish caught in area
 - cut into available fish
- 2 - Get rid of seiners/gillnetters/commercial fishing vessels
 - close to shore
- 1 - Seiners should not be able to kill small fish
- 2 - Nets should be limited to open ocean only
 - they block Johnston Strait
- 4 - Commercial fishermen are not friendly
 - lack courtesy
- 2 - Areas commercially overfished

Salmon Fishing Regulations

- 2 - Checked frequently/daily
- 6 - Fisheries officers were friendly
- 1 - Fewer large nets in tidal fishing area
- 1 - Outlaw treble hooks
- 4 - Enforce barbless hooks for fishing
- 1 - No "meat" for bait; live or otherwise
- 1 - Enforce fishing rules

Closures and Enhancement

- 1 - Department of Fisheries doing a great job
- 3 - Logging industry should be made accountable for log mess in spawn areas
- 1 - Sewage disposal is disastrous
- 2 - Create more spawning areas
- 3 - Pollution is terrible
 - on land
 - in water
- 1 - Clear small streams, eliminate stream pollution
- 3 - More fish enhancement programs
- 2 - Continue to rebuild salmon stocks
- 1 - Control pollution from paper mills
- 1 - Stiffer penalties for littering and polluting
- 1 - Close fishing to rebuild stocks
- 4 - More fish hatcheries
- 2 - Excellent hatcheries program
- 1 - Selective closures of areas
 - Port Alberni
- 1 - Closure of rivers to allow escapement
- 1 - Should have salmon fishing season closed for part of the year
- 1 - Government cooperation between Canada and U.S.A. is essential
- 1 - Build fish farms
- 1 - Keep nets out of river system
- 1 - Closed season during spawning times
- 1 - More accurate shellfish opening and closing instead of complete closure for the summer
- 1 - Better shellfish contamination control
- 1 - Re-open same waters between Canada and U.S.A. that were open before the 200 mile limit
- 1 - Fish stocks have decreased
- 1 - Too many small fish killed

Information

- 22 - More written information on how and where to fish
 - methods of transporting fish out of province
 - boat rentals
 - tackle
 - shrimp fishing
 - type of bait
 - fishing from shore
- 3 - Information on good salmon catch locations and times.
- 2 - Map on how to get to good fish area
 - show lights and landmarks
- 1 - More advertisements on lodging and moorage
- 1 - Simplify the standard tide table book
- 2 - Need more general advertisements
 - Alberta
- 5 - More information on red tide
- 1 - Map for red tide was vague
- 1 - Make information more accessible
- 1 - Good literature on package deals and tours
- 1 - More radio and T.V. reports

Costs

- 5 - Fishing costs: high
- 3 - General costs: high
- 4 - Total trip costs: high
- 10 - Ferry costs: high
- 1 - Gas prices need to be more consistent
- 5 - Gas cost: too high
- 1 - R.V. rental: too high
- 1 - Accommodation costs: too high
- 1 - Food prices: high
- 1 - Liquor prices: high

Native Fishing

- 2 - Native Indians lack consideration
- 1 - Native Indians should be treated like Canadian citizens
- 1 - Do not allow over fishing by Native Indians

General Comments

- 1 - Commercial and sportfishermen should be kept separate
- 1 - B.C. sportfishing is well handled
- 3 - Some areas should be designated as sportfishing areas only
- 1 - Increase areas for sportfishing only
- 8 - Crowded
 - Campbell River
 - Too many boats
- 1 - Ferry service was great
- 1 - Additional and better marked access to shore fishing
- 1 - Need more control over speeding boats where fishing boats group
- 1 - Tax foreigners on salmon they freeze, can, etc.
- 1 - Customs should not prohibit the importation of food for personal consumption
- 2 - Customs and Canadian officials were helpful and courteous
- 1 - Fisheries was helpful
- 1 - Coast guard was helpful
- 3 - RCMP/border officials/ferry officials were rude and discourteous
- 1 - Fishermen were discourteous
- 2 - Need more road signs for easier travel
- 1 - Should give out surveys with licence
- 1 - Since most of the shore is privately owned, how can others access the water
- 1 - Most released fish don't survive
- 1 - More places needed where fish can be processed
- 1 - Albertans should be exempt from B.C. sales tax to encourage tourism
- 1 - All services were very good
- 2 - Not much help from locals, they were unfriendly
- 1 - Government should check up on salmon processing plants: don't think we received all our salmon
- 1 - Seals take fish off the line
- 1 - Food was excellent
- 1 - U.S.A. and Canada should make chinook and coho sportfish only, leave sockeye and pinks to commercial fishermen
- 1 - Campbell River is fisherman's paradise
- 1 - Caught a lot of tagged fish
- 1 - Boat operators should require a licence to ensure water safety
- 2 - Make live bait available
- 1 - Cutbacks will damage tourism
- 1 - Concerned about new roads in "Blackwater River" area, it will spoil wilderness there
- 1 - Would be nice if customs were available at Bamfield